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# What is a Community Health Worker (CHW)?

Your guide to understanding the impact of effective community health worker programs and how they work



## Table of Contents

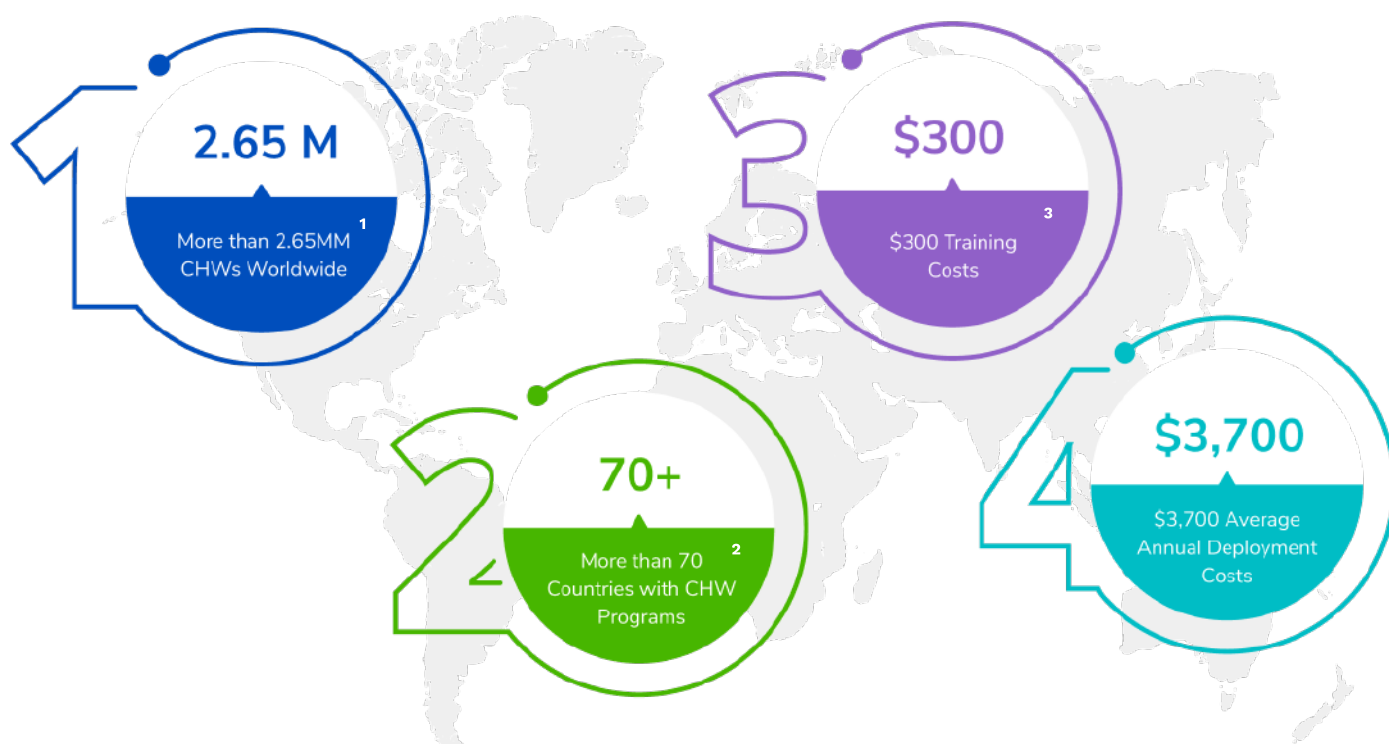
What is a Community Health Worker (CHW)?	03
Roles and Responsibilities for Community Health Workers	05
Challenges for Community Health Workers	07
National-Scale Community Health Worker Initiatives	09
Evidence for Community Health Workers	10
Community Health Workers with Mobile Data Collection	13
Community Health Worker Case Studies	16
What Community Health Workers Have to Say	17
Additional Resources on Community Health Workers	21

# What is a Community Health Worker (CHW)?

A community health worker (CHW) is a frontline worker dedicated to providing quality health care to their local community. Their close relationship with those they serve fosters a trust that gives their health recommendations, diagnoses, and referrals added authority. As a link to available health facilities, clinics, and other resources, the community health worker's objective is to improve the quality and availability of healthcare for underserved communities.

Most vulnerable populations are unable to access health services where they live – and when they can, the quality of care is usually low. Community health workers can offer essential care to these communities where they live. According to the World Health Organization, “the increased coverage of essential health services and improved equity in coverage envisioned by well-functioning community health worker programmes will result in fewer deaths and illnesses and lower disease burdens.”

## CHWs by the numbers



<sup>1</sup> Latest country estimates from WHO with numbers from India added from the World Bank

<sup>2</sup> [https://data.worldbank.org/indicator/SH.MED.CMHW.P3?most\\_recent\\_year\\_desc=false&view=chart](https://data.worldbank.org/indicator/SH.MED.CMHW.P3?most_recent_year_desc=false&view=chart)

<sup>3</sup> <https://www.frontlinehealthworkers.org/why-invest>

Community health workers are often selected by their community and end up being disproportionately female – more than 70%. Many countries also establish requirements for their community health worker candidates. For instance, to help support their maternal and child health initiatives, the Mozambique Ministry of Health has been giving preference to female candidates while requiring a minimum of a seventh-grade education.



According to the World Health Organization, “the increased coverage of essential health services and improved equity in coverage envisioned by well-functioning community health worker programmes will result in fewer deaths and illnesses and lower disease burdens.”

Recently, the World Health Organization released recommendations for the selection criteria for community health workers:

- Minimum educational level
- Membership of and acceptance by the target community
- Gender equity appropriate to the context (considering affirmative action to preferentially select women to empower them and, where culturally relevant, to ensure acceptability of services by the population or target group)
- Personal attributes, capacities, values, and life and professional experiences of the candidates (e.g. cognitive abilities, integrity, motivation, interpersonal skills, demonstrated commitment to community service, and a public service ethos)

The same recommendations also instruct programs not to select community health workers based on either age or marital status. According to an analysis by USAID, the most common selection criteria for CHWs were community residency, literacy, and gender.



Image Courtesy : Xaume Olleros





# Roles and Responsibilities for Community Health Workers

Community health workers can take on a number of different roles in their community, including responsibilities for different aspects of service delivery and the health system. The core responsibilities of a traditional community health worker role are to:

- Deliver health information and services (e.g. first aid, vaccines, diagnoses, counseling, etc.) to their local populations
- Improve the health-seeking behavior of their patients, employing their unique understanding of the situations and challenges they face
- Make home visits to patients unable to visit clinics or health facilities (e.g. high-risk illnesses, pregnant women, the elderly, etc.)
- Help their patients develop an understanding of and navigate available health resources (e.g. clinics, insurance, etc.)
- Facilitate communication, connections, and care between patients and the existing health system
- Collect data on the habits, conditions, and demographics of their community to help inform the improvement of local health services and policy
- Act as an advocate and representative of their patients and community to the health system to educate stakeholders and providers on health topics relevant to their community

## Definition of Community Health Worker Tasks (ISCO-08)

Organizations, such as the International Labor Organization, have also suggested a common understanding of the tasks that CHWs are responsible for:

<b>CHW delivers to individuals and families in a designated community</b>	<ul style="list-style-type: none"> <li>• Health education, referral, and follow-up</li> <li>• Case Management, basic preventive health care and home visiting services</li> <li>• Information, support and assistance in accessing and using local health and social services</li> </ul>
<b>CHW provides, in a local establishment or during a home visit, information on</b>	<ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Hygiene</li> <li>• Infant and child care</li> <li>• Immunizations</li> <li>• Family planning</li> <li>• Risks and prevention of common infectious diseases</li> <li>• Poisoning prevention</li> <li>• First aid or treatment of simple and common ailments</li> <li>• Substance abuse</li> <li>• Domestic violence</li> </ul>
<b>CHW regularly monitors certain conditions during home visits to families not usually accessing medical establishments, including</b>	<ul style="list-style-type: none"> <li>• Progress with pregnancy</li> <li>• Child growth and development</li> <li>• Environmental sanitation</li> <li>• Other conditions</li> </ul>
<b>CHW distributes and instructs family and community members in the use of</b>	Medical supplies to prevent and treat endemic diseases (e.g., malaria, pneumonia, diarrheal diseases)
<b>CHW reaches out to groups not usually accessing medical establishments to</b>	Provide information and basic medical supplies to prevent and manage health conditions for which groups are most at risk (e.g., HIV/AIDS, other communicable diseases)
<b>CHW collects from households and communities who do not usually access medical establishments</b>	Data for patient monitoring, referral, and reporting to meet health regulations

**Note :** Providers of routine personal care and traditional medicine are not included here.

The World Health Organization also recently shared a career ladder for a community health worker to show how their role can change within the health system over time – from volunteer responsible for offering health information and capturing data to trained (and paid) community health workers able to provide care and diagnose patients. Larger programs may also employ supervisory roles that are often filled by former community health workers.

# Challenges for Community Health Workers

While the community health worker model is a promising approach to healthcare for underserved populations, there are numerous issues that CHWs can face in their day-to-day work. Precisely what these challenges are will depend on the circumstances of the program, such as its location, funding, and workers' background, but they often fall into one of the following categories:



## Training

To improve the quality and speed of care, CHWs need to be well-trained in both the medical and administrative sides of the job. Unfortunately, whether it's due to low levels of literacy or education, poor training materials, or inconsistent refresher trainings, CHWs are often not well-enough equipped to reach their potential.



## Distance

While CHWs are responsible for the communities where they live, their catchment areas can cover great distances. Often, these locations can suffer from poor infrastructure, making travel times considerably longer.



## Low Pay

Some programs will offer stipends, but few support their workers with a salary. And when they do, it's rarely a livable wage. To be able to support their communities, these workers need to be able to support themselves, and that can mean sacrificing their short term productivity in order to put food on the table.



## Medical Supplies

CHWs can rely on local supply centers for the medical supplies they need. The problem comes when they show up to find stock-outs in the facilities, whether due to limited program resources or poor supply chain management.





### Limited medical records and patient documentation

Because of the limited medical infrastructure in the regions where the CHWs work, their patients and beneficiaries will rarely have an accessible medical history, decreasing their quality of care and ability to follow-up.



### Culture and community understanding

The poor or limited history of medical care in many countries can lead to distrustful beneficiaries or unsatisfied patients when they do not understand the role a CHW is meant to play as a liaison to a country's medical system.

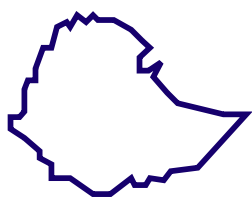


# National-Scale Community Health Worker Initiatives

In February 2019, USAID released a landscape analysis of 22 countries that employ a national-scale community health worker model. Overall, 53 CHW cadres were observed, averaging 2-3 per country, which shows how different initiatives require CHWs to perform different roles.

According to the analysis, all 22 countries employed at least one cadre that received both financial and nonfinancial incentives. The most common financial incentives were “per diems... followed by salary, cash payments, and performance-based payments.”

However, all 22 countries also benefited from the services of volunteer CHWs who receive nonfinancial incentives, such as frequent supervision, continuous training, and clear roles and communication channels for CHWs within health systems.



## Ethiopia's CHW Program

Ethiopia, one of the countries analyzed by USAID, is an unlikely success story. In one of the poorest countries in the world, the Ministry of Health has hired and trained 40,000 community health workers to provide essential health services around the country, combating child mortality, HIV, malaria, and TB. Since 1990, child mortality has decreased by 70%, HIV infections by 90%, malaria deaths by 75% and TB deaths by 64%.

While smaller, non-governmental organizations have been implementing the community health worker model on a local level with documented success, Ethiopia stands as an example of how even the most underfunded ministries of health can help improve health outcomes at a national level.

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# Evidence for Community Health Workers

Numerous studies and literature reviews have looked closely at the impact of community health worker-based programs, diving into outcomes, training times, and cost effects. In these reviews, the community health worker model has been proven to improve both health outcomes and patient knowledge – in some cases, at a lower cost than traditional healthcare programs. Here are a few of those studies whose results are worth reviewing:

## Community health workers programs can improve health outcome

Outcomes of Community Health Worker Interventions

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## Community health workers programs can improve health outcome

Outcomes of Community Health Worker Interventions

**“CHWs can serve as a means of improving outcomes for underserved populations for some health conditions.”**

A literature review by RTI International found that a community health worker model will improve health outcomes for underserved or low-resource communities depending on the health conditions they face. For instance, CHW interventions were found to have the greatest effect compared to alternatives when used for disease prevention, asthma management, cervical cancer screening, and mammography screening outcomes.



## The community health worker model can be a cost-effective approach

Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review

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## The community health worker model can be a cost-effective approach

Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review

**“Interventions by CHWs appear to be effective when compared with alternatives and also cost-effective for certain health conditions, particularly when partnering with low-income, underserved, and racial and ethnic minority communities.”**

A review supported by the National Institute of Health covered hundreds of individual studies, finding CHWs were most often responsible for health education, counseling, health system navigation assistance, and other social support. Interestingly, training times ranged widely, from as little as four hours to as much as 240, averaging just over 40 hours, while supervision was typically either weekly or monthly. According to eight articles on cost analysis, integrating community health workers into the health system “was associated with cost-effective and sustainable care.”

## Advice from community health workers can improve client behavior

Improving Asthma Management among African-American Children via a Community Health Worker Model: Findings from a Chicago-Based Pilot Intervention

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## Advice from community health workers can improve client behavior

Improving Asthma Management among African-American Children via a Community Health Worker Model: Findings from a Chicago-Based Pilot Intervention

**“Findings suggest that individualized asthma education provided by a trained, culturally competent CHW is effective in improving asthma management among poorly controlled, inner-city children.”**

A study by the Sinai Urban Health Institute showed that “symptom frequency was reduced by 35% and urgent health resource utilization by 75%” when a community health worker program began in Chicago, a city with twice the national rate of asthma. In this program, CHWs were responsible for providing individualized health education and, as appropriate, serving as links between the affected families and the health system. The study also showed the intervention to be cost-effective, saving an estimated \$5.58 per dollar spent.

## The community health worker model can help reduce costs

Measuring return on investment of outreach by Community Health Workers

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## The community health worker model can help reduce costs

Measuring return on investment of outreach by Community Health Workers

“After interaction with a CHW, primary and specialty care visits increased and urgent care, inpatient, and outpatient behavioral health care utilization decreased, resulting in a reduction of monthly uncompensated costs by \$14,244.”

A study published in the Journal of Health Care for the Poor and Underserved reviewed the potential cost savings and return on investment from implementing community health worker interventions. The study explains that CHW programs “are effective in improving access to health care, promoting client knowledge and behavior change, and contributing to improved health status of individuals,” but that few studies have also appreciated the potential return on investment of more than 2-to-1 that programs can achieve by using the model.





A close-up photograph of two women, likely of African descent, looking intently at a smartphone held by the woman on the right. They are wearing patterned headwraps and traditional clothing. The image has a soft blue overlay.

# Community Health Workers with Mobile Data Collection

A key recommendation in the World Health Organization's guidelines for community health worker programs highlights the value that mobile devices can provide. These tools can improve workers' performance, as well as the health-seeking behaviors and health outcomes of their clients. There are many studies that have looked at the effect of these mobile tools, including series of randomized control trials that have found a 46% increase in protocol adherence, a 60-75% increase in facility-based deliveries, and a 75% decrease in training times.

## Mobile tools can increase the scope and quality of CHW services

Community Health Workers and Mobile Technology: A Systematic Review of the Literature

**“By harnessing the increasing presence of mobile phones among diverse populations, there is promising evidence to suggest that mHealth can be used to deliver increased and enhanced health care services to individuals and communities, while helping to strengthen health systems.”**

A literature review of 25 studies on the use of mobile technology for community health worker programs found the prevalence and effectiveness of mHealth technology to be growing around the world: “Small-scale efforts, pilot projects, and preliminary descriptive studies are increasing, and there is a trend toward using feasible and acceptable interventions that lead to positive program outcomes through operational improvements and rigorous study designs.” The studies also reviewed the different uses of technology for CHW programs, as well as the various sectors that use them. Uses include data collection, notifications, education, two-way communications, and protocol adherence, while the broad range of health sectors highlighted maternal and child health, HIV/AIDS, and sexual and reproductive health. Studies that reviewed the effectiveness of mobile-enabled community health workers saw these tools “improve the quality of care provided, efficiency of services, and capacity for program monitoring.”

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## mHealth apps can strengthen health systems and improve quality of care

Mobile Health (mHealth) Approaches and Lessons for Increased Performance and Retention of Community Health Workers in Low- and Middle-Income Countries: A Review

“By harnessing the increasing presence of mobile phones among diverse populations, there is promising evidence to suggest that mHealth can be used to deliver increased and enhanced health care services to individuals and communities, while helping to strengthen health systems.”

A review of information from peer-reviewed journals, websites, and key reports found that “with partnerships forming between governments, technologists, non-governmental organizations, academia, and industry, there is great potential to improve health services delivery by using mHealth in low- and middle-income countries.” In this review, the mobile tools’ most common uses were to support CHWs with notifications, job aides, decision support, data collection features, and instant feedback. This report also includes some discussion of the need to scale the community health worker pilots into full, national-scale programs.

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## Mobile tools can improve CHW knowledge and client management skills

Large-scale implementation of electronic Integrated Management of Childhood Illness (eIMCI) at the primary care level in Burkina Faso

“The use of [a mobile tool for health delivery] was widely accepted and perceived as a powerful tool guiding daily practice. Findings suggest that it has positive effects on the health care system beyond the quality of consultation.”

A study from the Swiss Tropical and Public Health Institute reviewed community health workers’ reactions to the support and usability of a mobile tool for health education and protocol compliance. According to their interviews, users were highly satisfied, as the application helped improve their level of knowledge and ability to manage patients. They also reported a “positive change in health facility organization” and decision-making, using the application as a learning tool to improve their ability to provide primary care in Burkina Faso.

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## Mobile job aides can improve worker performance and authority

Mobile-izing health workers in rural India

“The creation and use of videos did help engage village women in dialogue, show positive effects toward health worker motivation and learning, and motivate key community influencers to participate in promoting the health workers.”

A study carried out by researchers from UC Berkeley examined how mobile tools helped community health workers overcome challenges associated with their limited education, training, and status, as well as resistance to change in the village. In the end, the mobile-based job aide increased the motivation and performance of the workers, while also giving leaders in the community a reason to promote the work of the CHWs.

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## Mobile tools can improve health outcomes while reducing costs

Cost effectiveness of mHealth intervention by community health workers for reducing maternal and newborn mortality in rural Uttar Pradesh, India

A study published in BioMed Central evaluated the cost effectiveness of Catholic Relief Service's Reducing Maternal and Newborn Deaths (ReMiND) program by looking at the incremental cost per disability adjusted life year (DALY) averted as a result of the intervention as compared to routine maternal and child health programs without ReMiND. In summarizing their findings, the study explains that if the program were scaled state-wide, it could save 312 maternal and 149,468 neonatal lives. They also found the program to be “a cost saving intervention from societal perspective,” saving a projected \$2,569 for every death averted.

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You can find [more studies on the effect of mobile tools for CHWs here](#).

# Community Health Workers Case Studies

Many programs employing a community health worker model have chosen CommCare to support the needs of their workers. From supporting the National Health Mission in Uttar Pradesh, India with Catholic Relief Services to offering healthcare to poverty-stricken communities in rural Guatemala with TulaSalud, CommCare-based mobile tools have improved worker performance and health outcomes around the world.

Here are some case studies of community health worker programs using CommCare:

## MHP Salud

### USA

For the last 35 years, nonprofit organization MHP Salud has implemented CHW programs to support underserved Latino communities across the United States. From case management for older adults to assistance navigating the Health Insurance Marketplace, MHP Salud's mobile app keeps track of participants across various community-based health initiatives, including referrals to external organizations. MHP Salud has increased enrollment in public assistance and health insurance programs and continues to offer support to over 5,000 Latino Americans annually struggling with mental health issues, chronic disease, and other health challenges.



## TulaSalud

### Guatemala

Due to a substantial majority of its population living below the poverty line and a severe lack of formal health services, Guatemala's northern highlands has one of the highest burdens of maternal mortality in the world. To improve maternal care and reproductive health in Guatemala, TulaSalud introduced a digital health program for frontline health workers. In collaboration with the Guatemalan Ministry of Health, the organization has enhanced its community-based digital health program by expanding its network of care beyond Alta Verapaz to three additional priority regions (Huehuetenango, Quiché, and Sololá) and increasing accountability at all levels.





# What Community Health Workers Have to Say

Community health workers have a wide range of responsibilities and come from an even wider range of backgrounds. Here, in their own words, they explain their roles, their routines, and how mobile tools have helped them succeed.

## Working on the largest mHealth program in the world

Launched in March 2017, the Integrated Child Development Services-Common Application Software (ICDS-CAS) was the largest e-nutrition program in the world. The application served as a key pillar of POSHAN Abhiyaan, the Indian Prime Minister's Overarching Scheme for Holistic Nourishment, supporting more than 600,000 frontline workers across 28 states in India.



## The responsibilities of a CHW vary by program

**A recent study of CHWs in Kenya** included interviews with the workers themselves, where they had an opportunity to discuss their responsibilities:

“The relationship between me and the facility is that I bring patients from the households to the facility. If there is an expectant mother or a mother who has had a home delivery I send them to the facility as quickly as possible and if it is a sick person I refer. We have a very good relationship which must be there. I am a link between the community and facility.”

*Community health worker from a rural county in Eastern Kenya discussing their role as a liaison between communities and the health system*

“I teach and help them construct dish racks and leaky tins, I show them the importance of mosquito nets so that they don't fall sick as they spend a lot of money in the hospitals. I also emphasis on hygiene and sanitation in the household and we make refuse pits and specific ones for disposal of sharps... Now I am happy that I have taught them and they are uplifting their health status.”

*Community health worker from a rural county in Eastern Kenya discussing their role as a health educator*

“On a daily basis as a CHW I go to my households which [I] am allocated and I pass not only on health matters. For those mothers who have school going children I also advise them to take their children to school. Also as a CHW I see to it that my structures are clean so that the environment is comfortable for everyone. Sometimes maybe once or twice in a month I organise a cleanup, so we clean the area surrounding my structures with the community not alone.”

*Community health worker in Nairobi, Kenya discussing the scope of their educational role*

“I inquire from the household member available. There is a section for pregnant women, children under five years, for referrals I have made, check up for the elderly, whether the household has Information Education and Communication materials, whether the CHEW/CHC has visited the household, whether the household gets health education through me, TB, and immunisation and vitamin A supplementation for the under fives, MUAC for assessing nutritional status of children.

*Community health worker from a rural county in Eastern Kenya discussing her data collection responsibilities*

## Many CHWs are volunteers

Despite certain recommendations from the World Health Organization addressing remuneration for community health workers, many of them are volunteers, holding jobs and responsibilities outside of their role as a CHW:

Within my schedule of work, I am a teacher by profession, a hotelier, and also an engineer; all those are my professions. What [I] am doing in my community is that I have allocated specific time as a volunteer within my community.”

*Community health worker in Nairobi, Kenya*

Besides being a CHW, I am [a] housewife, I do farming, I do the rest of the work in the house. I usually wake up very early in the morning and I take breakfast. I have some cattle so I get food for them.

*Community health worker in Eastern Kenya*

## Mobile tools can make CHWs' jobs much easier

Mobile tools can help community health workers improve their protocol adherence, the speed of their data collection, and the quality of their care:

“Without the REC, there are many questions we used to forget. But here, all the questions are listed and you cannot skip any of them. So to me, I think that we better manage patients. For example, when a child comes with a simple malaria, you can – without the REC – forget to identify anaemia.”

*CHW for leDA project with TdH*

“Introduction to CommCare has improved our work efficiency and self-confidence”

*An Accredited Social Health Activist (ASHA) – a kind of CHW employed by India's Ministry of Health*

“If a child comes for [a] consultation, we type his/her name and the name of his village, and we retrieve his history in a few seconds. This is impossible with the manual registry.”

*Health Center Nurse for leDA Project with TdG*

“A simple data collection application from CommCare revolutionized my project. It made it quicker, more confidential, and more accurate. Such technology has the potential to revamp the entire HIV testing & counseling strategy in Cameroon.”

*Community Health Volunteer, Peace Corps Cameroon*

“There has been a dramatic improvement in ASHA and Sangini (CHWs) knowledge and skills. Without the app, we could do very little.”

*A Ministry of Health official discussing the ReMiND project with CRS*



## Integrated eDiagnostic Approach

Program organizers and workers discuss using the Electronic Register of Consultations (REC) on the Integrated eDiagnostic Approach program, which aims to increase nurses' adherence to IMCI protocols and improve their quality of care by providing enhanced decision support and case management.





## Additional Resources on Community Health Workers

There are a number of high-quality resources from organizations such as the World Health Organization and the U.S. Centers for Disease Control that go deeper into the role of community health workers and how to support them.

### WHO Guideline on Health Policy and System Support to Optimize Community Health Worker Programmes

Launched in March 2017, the Integrated Child Development Services-Common Application Software (ICDS-CAS) was the largest e-nutrition program in the world. The application served as a key pillar of POSHAN Abhiyaan, the Indian Prime Minister's Overarching Scheme for Holistic Nourishment, supporting more than 600,000 frontline workers across 28 states in India.

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### U.S. Centers for Disease Control's Community Health Worker Toolkit

This collection of literature reviews, toolkits, and peer-reviewed research articles offers “online courses, lessons learned, and best practices to help health departments train and further build capacity for CHWs in their communities.” The toolkit covers policy, implementation, and training considerations for community health workers, as well as “training and education materials for community health workers to use within their communities.”

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## Living Goods' Digital Health Guide for Community Health Worker Programs

This digital health maturity model helps governments and other community health implementers grow effective digital health programs for the community level. The model evaluates three domains: (1) community health programs, (2) policy, funding, & technical infrastructure, and (3) existing health technologies, which positions health systems on a maturity level based on a 5-staged continuum scale. Along with a toolkit, the model helps programs identify areas of priority that inform strategy development, investment cases, and a structured pathway to implementing a scalable sustainable digital health program for community health.

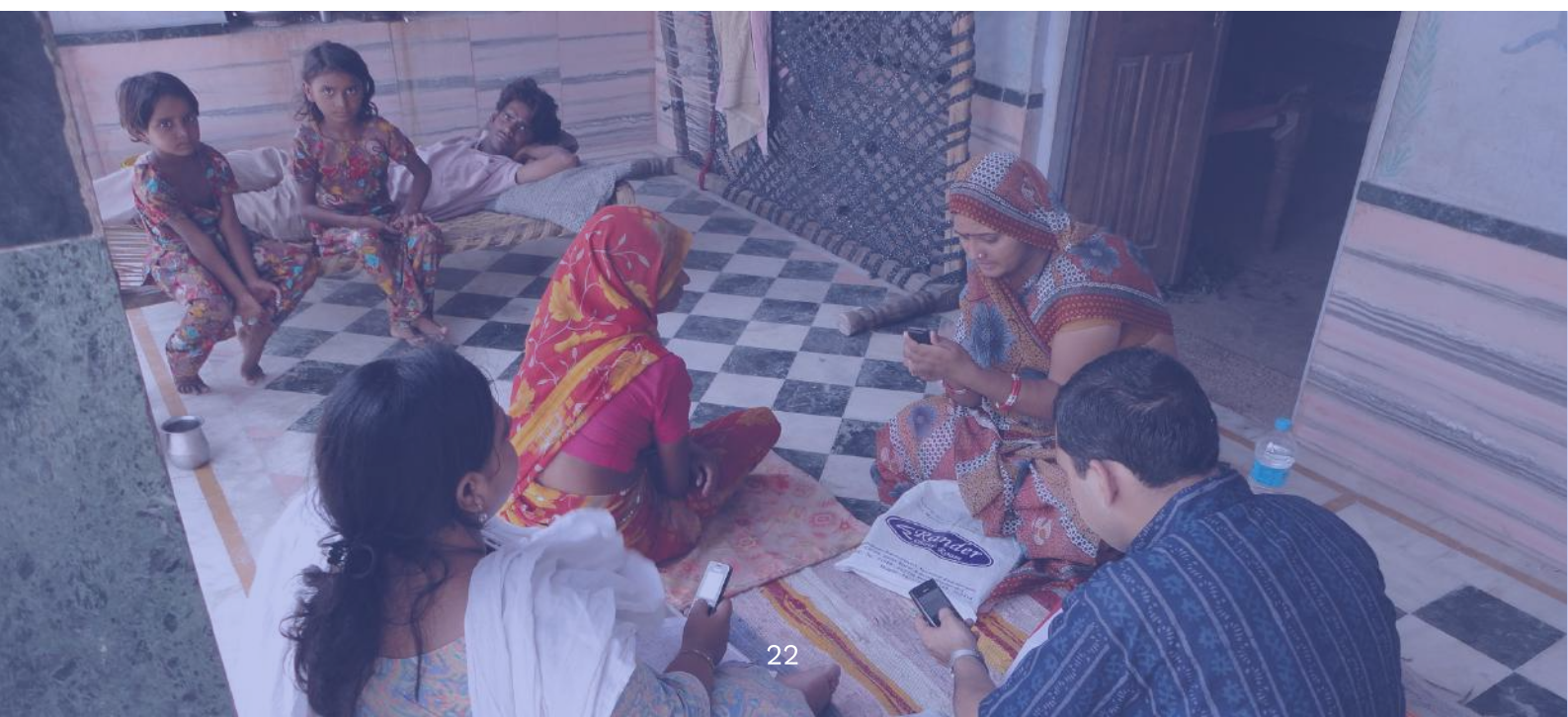
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## Johns Hopkins University's Global Health Initiative: Mobile Technology in Support of Frontline Health Workers

A study from a group of researchers at Johns Hopkins reviewed the use of mHealth tools to support frontline health workers on more than 140 projects around the world. We are particularly fond of this report, as it points out that CommCare is the application of choice for the majority of these projects, most of which were based in Africa (91 in total). Review this report to learn about how the mHealth tools were organized under 12 different functions, including data collection, electronic decision support, and client education and behavior change communication.

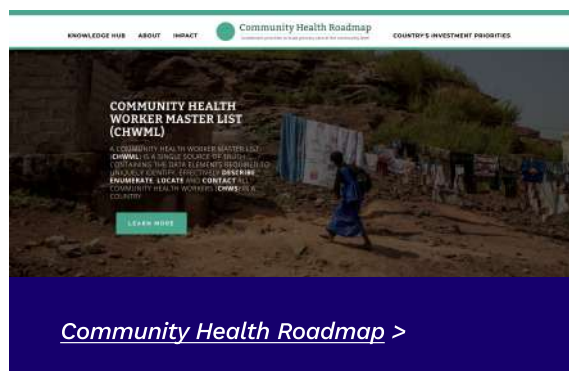
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## Helpful Sites

There are also a number of websites that do a good job of outlining the roles and responsibilities of community health workers, as well as best practices and other resources:



## Stay in the know

There are active email listservs that do a great job of connecting people who are or work with community health workers. Sign up now to get additional CHW information sent your way:



# What's next?

Visit [www.dimagi.com/commcare](http://www.dimagi.com/commcare) for more personalized advice from the team who built the world's most powerful mobile data collection platform:



## **Empower end-users**

Collect quality data by building an app that guides your workforce to do their best work.



## **Start small and scale**

Invest in a data collection app that will keep pace with your growth.



## **Track data**

Build smarter data collection apps that allow you to collect and track data over time.



## **Work offline**

No signal? No problem. Build a data collection app that works offline.

